Rheumatism

#1

An Inaugural Essay
For the degree of
Doctor of Medicine
Submitted to the
Examination of the
Provost
The Trustees and
Medical Professors of the
University of Pennsylvania
On the Nineteenth day of April
1810

S

of the

School u

and Phe

the barg

acted on

It also

usually

nected

at all

Autumn

cold an

In the prosecution of this essay I propose to treat of the different forms of Rheumatism, taught in our School under the names of Rheumatism, Rheumaticula and Rheumatalgia. —

Rheumatism is a disease generally affecting the large joints, particularly those that are most acted on in the different exercises of the body. It also affects the muscles of the extremities and is occasionally found to affect other parts more or less connected with such as are primarily attacked. It occurs at all seasons of the year, but most frequently in Autumn and Winter; and is more a disease of cold and variable, than of warm climates. —

after a
prevail
cases a
persons
between
Soldiers,
to violen
=tudes o

Rheuma
=disposi
most co
exercise
inducing

after a Winter that has been uniformly cold, it often prevails in the spring, and violent inflammatory cases are sometimes met with in the summer. It affects persons chiefly in the meridian of life, or at any period between the age of puberty and the fortieth year. Sailors, Soldiers, fishermen and others who are much exposed to violent and irregular exercise, and to great vicissitudes of temperature are most subject to its attacks.—

The Causes which concur in the production of Rheumatism, may be divided into the remote, the predisposing, the exciting and the proximate. The most common remote causes of the disease are violent exercise and irregular labour which dispose to it, by inducing debility in the joints and muscles which

are

are its

-duce

-ed to

of it, m

-plaint

debility,

parts w

those w

such as

changes

-tially

applicat

are its ordinary seats. But every thing tending to pro-
duce debility in other parts of the body that are allow-
ed to be either primarily or secondarily susceptible
of it, may be regarded as a remote cause of the com-
plaint

The predisposing cause of Rheumatism is
debility, either directly or indirectly induced in those
parts which it is generally observed to attack. ~

The exciting causes of the disease are the same as
those which excite other inflammatory affections; ~~and~~
such as intemperance in eating and drinking, sudden
changes of the weather, cold either generally or par-
tially applied to the body, damp air, the continued
application of cold water, wet clothes, lying in damp
sheets

shuts, sit

night or

cold and

to check p

-nation to

this head

excessive d

stopping

all act b

actions in

to fix the

Rheumatic

Lues Vene

-ting fev

sheets, sitting or lying on moist ground, travelling in the night or being much exposed to the night air: In short cold and moisture applied in any way so as suddenly to check perspiration or to produce an undue determination to the joints, or other debilitated parts. Under this head may also be enumerated repelled eruptions, excessive discharges of any kind, and the sudden stopping of customary or natural evacuations; they all act by exciting morbid, deranged or unnatural actions in the system, which have a necessary tendency to fix themselves upon parts predisposed to disease. Rheumatism is also sometimes the effect of Scurvy, Lues Venerea, and protracted intermitting or remitting fevers. ~

The prox
unnatura
n parts
nomena
to be co
The
ocysme of
tension of
reat sen
malory a
s a full,
heat, rest
disease u
sensation

The proximate cause of Rheumatism is that morbid, unnatural or irregular action in the vessels of the parts affected exhibiting itself in the various phenomena or symptoms of the disease which come next to be considered. — —

The symptoms usually characterising a paroxysm of acute Rheumatism are heat redness & tenderness of the part affected with a sense of throbbing pain & sensibility, and the ordinary signs of inflammation existing in other parts of the system, such as a full, tense, frequent & bounding pulse, thirst, hot urine, & a sense of extreme anxiety. The tongue usually commences with a full & white coat of fur and old Rheumatism with white or

The chile

or after

disease

abates a

of first

of

edema

to inter

ness com

of slight

the disea

and be

ness

attended

The chill which ushers in an attack of Pneumonia, is often very severe and continues in some cases for a time to rise it is then succeeded by a fever which abates after some days, and during its abatement the patient will often be visited by a gentle perspiration. The urine is sometimes high coloured, depositing a copious sediment after a few days. At the termination it is perfectly clear without any sediment whatever. Pain more or less severe commonly attends, increased increasing on the slightest motion, manifesting at certain stages of the disease a great disposition to translate itself from point to point especially during the night. Towards a more or less copious perspiration breaks out attended with an abatement or remission of fever and

and a p

some ins

[ say, whe

might

symptom

suffering

means un

is equally

[ i.e. pl

After the

a swellin

obvious &

t., b

t. Sect

and a partial alleviation of pain; and the patient in some instances during the day finds himself tolerably easy while free from motion. But generally towards night the paroxysm returns bringing back all the symptoms with their usual severity, and the patients sufferings are again renewed. This however is not by any means uniformly the case for the pain in some instances is quite acute in the day, or suffers little or no perceptible remission.

After these symptoms have continued for some time, a swelling of the part principally affected becomes obvious & considerable. The pain after this is not so acute, but increases on the slightest impression.

The tumefaction increases strength it partly generally diminishes

diminut

it joi

which

a fact.

or serum

Rh

got. th

th. bu

=bical ac

attack, b

appear n

a and pec

d. th, b

ed of pre

diminishes does not always carry off the pain or swelling the joint against a severe attack. The shifting which takes place in inflammatory Rheumatism is probably the consequence of an effusion of lymph or serum from the blood vessels.

Rheumatism differs from Gout in being more entirely local, that is in being less liable to affect the stomach the bowels or viscera in being attended with more severe aches, and in being hardly confined when it attacks the extremities, to the larger joints. They appear nevertheless to be nothing but dry not purulent inflammations of the same disease caused by their seats by their causes and by the various circumstances of predisposition which conduce to give rise to them.

Doctor A

which b

swelling

-ing, and

ffimical

form of th

the work

R

fact. Y

it differs

Doctor Sydenham describes a Scorbutic Rheumatism which he says was not attended with much fever as with a disease in which the pains were more severe and also the symptoms not uniform. Females and effeminate constitutions are said to be most liable to the form of the disease. But Doctor Kirst in a note to the notes of Doctor Sydenham states that it is very common in the United States.

Rheumatism in its common form is sudden & fixed. The inflammation & swelling accompanying it differs from almost all others, generally terminating in resolution, rarely in suppuration and never in gangrene. When death occurs it is either in consequence of suppuration or some other morbid local

local off

of the de

ild prep

we are to

first of wh

deathless

pain and

inflammat

fected.

remedy is

e.g. rum

tal frequ

local affection producing hectic fever or of a transitation of the disease to more vital parts. When it occurs in old people it is seldom cured.

In the Cure of acute Rheumatism we are to be guided by two principal indications: the first of which is to reduce the fever and inflammatory diathesis which may be present: the second to alleviate pain and by proper local applications to reduce the inflammation and swelling of the part or parts affected.

To answer the first indication, our first remedy is Bloodletting. Blood should be drawn in large quantities and the bleeding repeated more or less frequently according to the greater or less

feling u

bleedings

highly

because the

ly. They ly

h. They p

tutter effe

second att

which lay

tions bet

nefs and

a great

duration of

sing.

fulness and hardness of the pulse. Large and repeated bleedings during the first days of this disease, are highly necessary, on the following reasons; first because they tend to shorten the period of the disease. 2d. They lessen the severity of the pain which attends it. 3d. They prevent the system from wearing itself away by fruitless efforts and thereby prevent a predisposition to a second attack. 4th. They prevent those morbid effusions which lay the foundation of rheumatism and other concretions between the joints, and thereby prevent lameness and deformity. 5th and lastly. They supersede in a great measure the exhibition of active purges the operation of which is extremely inconvenient and distressing.

Th. m. 1

purging-
thou tha
as Sulp
Salts &c.
constipati
substanc
means of

Ar
promise t
on small

the treat
Medicines

The next remedy to be mentioned under this head is purging. The purges most proper in Rheumatism are those that act slowly and gently on the bowels, such as Sulphur, Cream of Tartar, Castor oil, the neutral Salts &c. They give relief in two ways (viz) by removing constipation, and by discharging bile and other acrid substances from the intestines, which are often the means of aggravating the symptoms of the disease.

Antimonials are recommended, but do not promise to be of much service, except when given in small and nauseating doses to excite perspiration.

Another remedy of great importance in the treatment of Rheumatism, is sweating. Medicines given to excite sweating in this disease should

should be
such as Ar
Rivers pow
and when
If added b
it excites c
same time
After the b
is given wi
Tain been a
20 to 100 dr
after eight
The patient
kept cool a

should be of the least heating or stimulant kind, such as Nitre, Tartar Emetic, Ipecacuanha, and the lit. Dover's powders is an excellent medicine in Rheumatism, and when judiciously administered does great sense. If aided by draughts of warm debilitating drinks it excites a copious discharge from the skin at the same time that it lessens the pain and induces sleep After the lancet has been used liberally Digitalis may be given with advantage The following formula* has been advised. Take of Tincture of digitalis from 80 to 100 drops of crude nitre one drachm and of pure water eight ounces M this to be taken in 24 hours The patient throughout the whole of his disease should be kept cool and quiet as possible, and avoid all irritating

*Dr Barton

irritating

of remedie

mention a

when the

relief dem

all over th

are left el

remedies.

and the p

blisters an

vantage

irritating and disquieting passions of the mind.

To fulfil the second indication a variety of remedies have been recommended. I shall only mention a few of them

Topical bloodletting is often found serviceable when the local inflammation is great, and immediate relief desired. With this view leeches may be applied all over the inflamed part. Cupping and scarification are less eligible, being more painful and more irritating remedies.

After sufficient bleeding has been premised and the pain has become fixed to a particular joint, blisters are highly useful, but afford little or no advantage before. To ease pain Doctor Sydenham

applied wh
a view to
the inflamm
combined
sweating a
diseases a
cold, the
light or b
-fortable.
with great
as inflam
applied
the cure

applied always leaves with success. Opium except with a view to mitigate pain, ought never to be given in the inflammatory stage of Rheumatism, unless it be combined with some medicine calculated to induce sweating or a determination to the skin.

Cold and cool air, as in other inflammatory diseases are proper. The part affected should be kept cool, the dressings should be thin, and the bed clothes light or barely sufficient to render the patient comfortable. I have seen cold water applied in one instance with great advantage in acute Rheumatism. It reduces inflammation and allays pain, and may be applied either by ablution or jactation. In a word the cure of acute Rheumatism depends upon a

you and
should be
from anem

locks, h
exciting c
and preven
apment m
stem shul
ulin exer
of climal

Th
calc. E

rigid antiphlogistic plan of treatment. A low diet should be strictly observed, and a total abstinence from animal food, and from all spirituous liquors.

To guard the patient against future attacks, he should be directed to avoid all the usual exciting causes of the disease, but these occasionally and prevent costiveness by the occasional use of gentle aperient medicines. The wearing of flannel next to the skin should be recommended; also moderate and regular exercise, the cold bath; and lastly a change of climate. - - - - - - - - - - -

I come now to offer a few observations on Rheumatalgia, what is more commonly called Chronic Rheumatism.

In

acute h

il com

pulse is

but small

but a cont

gether or

though no

d st.iff

cause

d th.

has a fe

bits. is

In this which for the most part succeeds acute Rheumatism, the patient can sit up and, with some little pain & difficulty, walk about. The pulse is synchronous, a quick, frequent moderately tense but small, the disease is not attended with chills, but a constant fever, and the swelling disappears altogether as is scarcely observable. The pains still continue though not with their usual violence, but causing most sleepless nights of the patient are subject to increase at night. They are likewise increased by motion and the changes of the weather: hence patients often have a presentiment of a change about to take place before it actually happens.

The causes of Rheumatism are the same.

some in their progress acute Rheumatism.

The remedies for this form of Rheumatism are but frequent and small venesections: without these can make but little impression upon the disease. Bleeding should be drawn more or less copiously according to the constitution and state of the system, the pain in very violent being an guide. The cathartics: these should be mild as the neutral salts sulphates, magnesia, or a of tartar &c. Dig. Blisters. they are to applied blisters not to the affected part, immediately not. Dr. Hosack* has lately found that blisters applied to the feet are much more efficacious. Some let a mixture the [illegible] place blisters let. 5 this are battle. Salivation:

* Clinical Reports

this

this acts by
points to t
Saturation
in the cure
a skillful

Af
tonics st
to with a
on this sta
-ebulition.
modulation

provided

this acts by translating morbid excitement from the parts to the salivary glands. Without the use of Salivation we should be much more frequently failed in the cure of Chronic Rheumatism, than we are under a skillful application of this invaluable remedy.

After sufficient depletion, Stimulants and tonics either internal or external, may be resorted to with advantage and safety. The particular times, as well as the results and force of stimulants necessary in this state of the disease, will depend on the constitution of the patient, his former habits and his condition at the time they are to be administered.

This form of Rheumatism may also be avoided by avoiding exposure to cold, by a

cleanly

occasionally

other mule

ker, the

pas whe

would to

llen

these pro

it is a

with - f

see be

at the

occasionally taking a cathartic of sulphur, or some other mild purge; by wearing flannel next to the skin, the cold bath, a change of climate &c.

I shall proceed to the third division of this essay which is to offer a few remarks on Rheumatism.

This arises from an imperfectly cured Rheumatism, a neglected or protracted Rheumatism and is usually attended with a considerable degree of irritability.

The causes of Rheumatism are the same as those producing acute and chronic Rheumatism. It is generally attended with lameness but seldom with pain. It continues not only for months and years but frequently during life. The pain is seldom acute or constant in it but occasionally

returns

return at uncertain and irregular periods. In some instances after continuing a great [illegible] they [illegible] [illegible] to [illegible] the patient entirely free at [illegible] to [illegible]: though it is more frequently continued even [illegible] years, unless the patient succumbs at the last moment of his existence. Persons taking [illegible] as a protective form of Potassium [illegible] are sometimes totally deprived of the use of their limbs, partially in consequence [illegible] [illegible].

[illegible] for the free [illegible] [illegible] [illegible] divide them [illegible] into two classes internal and external. I shall briefly mention each of them in which the most distinguished for their efficacy, i.e. which are most [illegible].

unusually

it simple

nogueon air

tion of Ser

the spontan

or opium o

In . . . a

hu of late

albuminate

or as fa

Amo

in the bra

unusually approve.

If other remedies are required, either the simple or the volatile Tincture, the decoction of mezereon and sarsaparilla, decoction of pitch trees, decoction of Senega, Mustard and pepper, the decoction or the spirituous oil of sassafras, oil of amber, camphor, or opium and camphor combined.

In the* Spinal Prickly ash or tooth ache tree, a native aperient, a tincture of this article has of late been highly extolled in this form of Rheumatism; but I am not able to say any thing in its favour from my own observation.

Among the external remedies to be employed in the treatment of the Rheumatalgia the first to be

* See Eaton's Botany p. 161

be impossible
of awakening
and thus
the vapour
of
-pid state
a thing m
bath will
quantity of

if result.
Stimulat
means of

be mentioned is the warm bath: this has the effect of awakening the dormant excitability of the system and thereby preparing it for the successful use of the remedies. When a bath of warm water fails the vapour bath should be tried.

After the system has been rouse from its torpid state, the cold bath may succeed the warm, & they may be used alternately. The efficacy of the warm bath will be increased by depositing in the water a quantity of table salt.

Friections by the hand or a flesh brush if gentle and long continued, are of great advantage. Stimulating unctuous preparations applied by means of friction have often done good.

a very g

gr. mono

live oil

tion of th

Tincture

Application

b. lum

Electricity

Pain fault

b. has

formal, to

Vesting c

ness in c

duration, w

A very good one is made of Opium and carbonate of ammonia each one drachm, camphor two scruples, olive oil one pound; rub them together, and apply a portion of the ointment twice a day. The volatile liniment Tincture of Cayenne pepper the spirits of turpentine, and applications of mustard and horseradish have all in the hands done service in this stage of the complaint. Electricity has often succeeded when other remedies have failed. The patient should always be directed if he has not been in the habit of wearing it, to put on flannel, to use exercise and lastly to change his air. Visiting certain Medicinal springs will often perform cures in cases of the most obstinate kind and of long duration, when all other remedies prove abortive —

I shall

in the m

-nalism,

diseases, c

remedies.

-hold the

-tain; a t

a time to

would be

cure of th

-dies in

In

I have en

it is a de

I shall conclude this essay by observing that success in the management of the different states of Rheumatism, as well as in the management of all other diseases, consists in an eminent degree in timing remedies. There is a time to bleed and a time to withhold the lancet; a time to purge and a time to abstain; a time to sweat and a time to give anodynes; a time to stimulate and a time when stimulants would be improper and pernicious. In a word the cure of the disease must depend upon proper remedies in their proper times and places.

In retiring from this university in which I have enjoyed so many important advantages, it is a duty I owe to gratitude as well as to individual

individua

unfeigned

their truly

-ible rem

long enjoy

&c. &c.

been so pu

may conti

hands, an

crowned wi

eminently

of Your

individual merit, to offer to the Medical Professors my unfeigned thanks. Of the instruction I have derived from their truly valuable lectures, I shall retain an indelible remembrance! That each of you Gentlemen, may long enjoy in health and vigour that life which has been so publicly useful; that the sciences you teach may continue to flourish under your fostering hands, and that your labours may ultimately be crowned with that honor and happiness you all so eminently deserve, is the fervent and sincere wish of Your friend and devoted

R. Muldrow